

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
250 Washington Street, Boston, MA 02108-4619

CHARLES D. BAKER
Governor

KARYN E. POLITO
Lieutenant Governor

MARYLOU SUDDERS
Secretary

MARGRET COOKE
Acting Commissioner

Tel: 617-624-6000
www.mass.gov/dph

ADVISORY REGARDING FACE COVERINGS AND CLOTH MASKS

Updated July 30, 2021

This Advisory has been updated as of July 30, 2021.

On July 27, 2021, the federal Centers for Disease Control and Prevention issued updated guidance regarding the use of face coverings and cloth masks by individuals who are fully vaccinated for COVID-19. COVID-19 vaccines are highly effective and every individual who is eligible and either works, studies or resides in Massachusetts is advised to get vaccinated.

The updated CDC guidance continues to state that individuals who are fully vaccinated may, as a general matter, resume many of the activities that they engaged in prior to the pandemic without wearing a mask or staying 6 feet apart, except where otherwise required by federal, state, or local laws, rules or regulations. In response to the recent spread of the Delta variant, however, the CDC's updated guidance does recommend that even fully vaccinated persons wear masks or face coverings when indoors if other risk factors are present.

In light of the information provided by the CDC, and in order to maximize protection of vulnerable individuals from the Delta variant, the Department of Public Health now advises that a fully vaccinated person should wear a mask or face covering when indoors (and not in your own home) if you have a weakened immune system, or if you are at increased risk for severe disease because of your age or an underlying medical condition, or if someone in your household has a weakened immune system, is at increased risk for severe disease, or is an unvaccinated adult.

Your primary care provider can advise you whether you are at increased risk. Information from the CDC on the conditions that may put you at increased risk can be found here: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>.

An individual is fully vaccinated two weeks after their second dose in a two-dose series, such as the Pfizer or Moderna vaccines, or two weeks after a single-dose vaccine, such as Johnson & Johnson's Janssen vaccine. However, if a fully vaccinated individual becomes symptomatic, they should be tested and wear a mask until receiving test results.

All people in Massachusetts (regardless of vaccination status) are required to continue wearing face coverings in certain settings, including transportation and health care facilities. Please see www.mass.gov/maskrules for a complete list of venues where face coverings remain mandatory as of May 29, 2021.

For individuals who are not fully vaccinated, it is important that you continue to wear a face covering or mask to help prevent you from spreading COVID-19 to other people. People who show no symptoms of illness may still be able to spread COVID-19.

For individuals who are not fully vaccinated, the CDC advises the following:

- Wear a face covering or mask that covers your nose and mouth.
- Stay 6 feet apart from others who don't live with you.
- Avoid crowds and poorly ventilated indoor spaces.
- Wash your hands often with soap and water. Use hand sanitizer if soap and water aren't available
- Get tested if you have been exposed to or have symptoms associated with COVID-19.

When you wear a face covering or cloth mask, it should:

- Fit snugly but comfortably against the side of the face,
- Be secured with ties or ear loops,
- Include multiple layers of fabric,
- Allow for breathing without restriction, and
- Be able to be laundered and machine dried without damage or change to shape.

For more information, please refer to the CDC at: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated-guidance.html>

This advisory may change based on public health data and further guidance from the CDC.



Jeffrey C. Riley
Commissioner
Massachusetts Department of
Elementary and Secondary Education



Margret R. Cooke
Acting Commissioner
Massachusetts Department of Public Health

MEMORANDUM

TO: Superintendents, Charter School Leaders, Assistant Superintendents,
Collaborative Leaders, Leaders of Approved Special Education Schools
FROM: Jeffrey C. Riley, Commissioner, Department of Elementary and Secondary
Education
Margret R. Cooke, Acting Commissioner, Department of Public Health
SUBJECT: DESE/DPH COVID-19 Guidance for Districts and Schools: Fall 2021
DATE: July 30, 2021

Background and context

As noted in the Updates to DESE COVID-19 Guidance released on May 27, 2021, all districts and schools will be required to be **in-person, full-time, five days a week this fall** and all previously-released Department of Elementary and Secondary Education (DESE) health and safety requirements will be lifted.

Recent updates by the Centers for Disease Control (CDC) to its Guidance for COVID-19 Prevention in K-12 Schools emphasize the importance of all students returning to full-time, in-person school this fall. The CDC guidance supports the use of vaccines as the primary mitigation measure in school settings, and also continues to recommend masking in K-12 schools. Additionally, according to the CDC, "Because of the importance of in-person learning, schools where not everyone is fully vaccinated should implement physical distancing to the extent possible within their structures, but should not exclude students from in-person learning to keep a minimum distance requirement."¹

Massachusetts has among the highest vaccination rates of any state in the nation,² and evidence continues to reinforce that the COVID-19 vaccines are highly effective, especially against severe disease.³ At the same time, even for those students not yet vaccinated, the apparent risk of

¹ Guidance for COVID-19 Prevention in K-12 Schools: Physical Distancing: <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-guidance.html#physical-distancing>

² "Data Table for COVID-19 Vaccinations in the United States," CDC 2021. Data as of July 26, 2021. Available at: <https://covid.cdc.gov/covid-data-tracker/#vaccinations>

³ Jamie Lopez Bernal, Nick Andrews, Charlotte Govver, Eileen Gallagher, et. al. July 21, 2021. "Effectiveness of COVID-19 Vaccines against the B.1.617.2 (Delta) Variant." The New England Journal of Medicine. Available at: <https://www.nejm.org/doi/full/10.1056/NEJMoa2108891>

COVID-19 to children remains small.^{4 5 6 7} These factors continue to reinforce that many previously instituted COVID-19 mitigation measures in school settings are no longer necessary.

In a [letter](#) released earlier this month, U.S. Education Secretary Cardona reiterated the importance of COVID-19 vaccine adoption for eligible students. This reinforced the [message](#) sent by Department of Public Health (DPH) and DESE Commissioners Bharel and Riley last school year indicating that vaccination is a critical strategy in mitigating the impact of COVID-19 on in-person learning.

Fall 2021 recommendations

This guidance document was developed jointly by DESE and DPH and outlines recommendations on [masking](#), [COVID-19 testing](#), and [quarantine protocols](#). It also includes information on [back-to-school vaccine clinics](#), [local vaccine sites](#), and [public awareness materials for families](#).

DESE and DPH also continue to encourage schools to maintain ventilation upgrades from this past year as feasible, continue hand hygiene practices, and extend policies for students and staff to stay home when sick. As always, we will monitor the public health situation and may issue additional guidance as needed.

Please note: The DESE COVID-19 Help Center remains open and available for consultation with districts and schools. Please do not hesitate to call with any questions at (781) 338-3500.

DESE and DPH will also issue Frequently Asked Questions (FAQs) related to this guidance.

Masking

- **This fall, DESE and DPH [strongly recommend](#) that all students in kindergarten through grade 6 wear masks when indoors, except students who cannot do so due to medical conditions or behavioral needs.** Masks are not necessary outdoors and may be removed while eating indoors.
- **DESE and DPH also [strongly recommend](#) that unvaccinated staff in all grades, unvaccinated students in grades 7 and above, and unvaccinated visitors wear masks indoors, in alignment with the statewide [advisory](#) on masking.**

⁴ Massachusetts COVID-19 Response Reporting. 2021. <https://www.mass.gov/info-details/covid-19-response-reporting>

⁵ Coronavirus Disease 2019 in Children — United States, February 12–April 2, 2020. MMWR Morb Mortal Wkly Rep 2020;69:422–426. DOI: <http://dx.doi.org/10.15585/mmwr.mm6914e4>

⁶ J L Ward, R Harwood, C Smith, et. al. July 2021. “Risk factors for intensive care admission and death amongst children and young people admitted to hospital with COVID-19 and PIMS-TS in England during the first pandemic year.” medRxiv. *Please note: this is a preprint study that has not yet completed peer review.* Available at: <https://www.medrxiv.org/content/10.1101/2021.07.01.21259785v1>

⁷ Clare Smith, David Odd, Rachel Harwood, Joseph Ward, et. al. July 2021. “Deaths in Children and Young People in England following SARS-CoV-2 infection during the first pandemic year: a national study using linked mandatory child death reporting data.” Research Square. *Please note: this is a preprint study that has not yet completed peer review.* Available at: <https://www.researchsquare.com/article/rs-689684/v1>

Additional Information

Back to school vaccination clinics

A number of schools have hosted vaccination clinics on campus since May, which have served as an important tool in our collective efforts to vaccinate all eligible Massachusetts residents. Vaccination clinics at schools make vaccinations easier to access and more convenient for students and their families. We urge all schools, and in particular those with vaccination rates below the Massachusetts state average, to host an on-site vaccination clinic during summer orientation events or when classes begin. A DPH-approved mobile vaccination provider, including clinic staff and vaccination administrators, will be provided free of charge. Interested schools can submit their request via our [online form](#).

Local vaccination sites

More than 900 vaccination sites are available across the state and most accept walk-in appointments, including CVS and Walgreens pharmacies, pediatric primary care offices, and community health centers. As a reminder, the COVID vaccine is free for all, and no ID or insurance is needed to obtain the vaccine.

More information on these sites, as well as safety information, and helpful Q&As are all available at www.mass.gov/covidvaccine.

Public awareness materials for families

We encourage districts and schools to use their communications channels including social media, newsletters to parents, and flyers and posters to encourage vaccination.

The successful *Trust the Facts. Get the Vax.* statewide public awareness campaign is now focused on raising awareness and engaging parents. We know many parents and guardians may have questions about their children getting vaccinated and so the [latest TV spot](#) features pediatricians from our community health centers and hospitals on the importance of vaccinating our young people. A [Spanish language version](#) is also available featuring Spanish-speaking clinicians.

Another short, animated message is available [here](#). It is available in 10 languages. You can find these videos and other materials and graphics in multiple languages [here](#).

We continue to urge all school personnel to get vaccinated to protect themselves, their families, and their school community. We appreciate your assistance to keep all of our students, faculty, staff, and volunteers safe and healthy.

- **DESE and DPH recommend that schools allow vaccinated students to remain unmasked.**
- Any individual at higher risk for severe disease from COVID or with a household member who is at high risk is encouraged to mask regardless of vaccination status consistent with the updated DPH Advisory on Face Coverings and Masks.
- Any child or family who prefers to mask at school should be supported in this choice.
- By federal public health order, all students and staff are required to wear masks on school buses at this time.
- All staff and students must wear masks while in school health offices. Additional guidance for school health professionals is forthcoming from DPH.

Please note: DESE and DPH will continue to consult with medical advisors and may update the masking requirements above as we learn more about COVID-19's effects on hospitalizations in Massachusetts and on children.

COVID-19 testing

Districts and schools are highly encouraged to maintain or establish a robust plan for COVID-19 testing in schools, including both diagnostic testing and screening (pooled) testing for students and staff. DESE and the Executive Office of Health and Human Services will continue to offer these services at no cost to districts. These no cost services will include optional support for districts who would like additional staff to conduct testing on-site and/or help with testing logistics and communication.

Diagnostic testing, such as the BinaxNOW rapid antigen test, is an important tool for use in testing asymptomatic close contacts as part of updated quarantine guidance (see below). Diagnostic testing is especially important this year, as we head into cold and flu season. Districts are strongly encouraged to sign up for the statewide COVID-19 testing program as soon as it becomes available later in August to minimize the number of students required to quarantine outside of school.

Further information will be forthcoming.

Contact tracing and quarantine protocols

DESE and DPH will soon release a new version of the "Protocols for Responding to COVID-19 Scenarios" document. **As part of this guidance, districts in the statewide testing program or using other approved diagnostic tests will be able to implement a new "test and stay" protocol in lieu of requiring asymptomatic close contacts to quarantine.** Under test and stay, asymptomatic close contacts will have the option to remain in school and be tested daily with BinaxNOW for at least 5 days. Vaccinated staff and students are exempt from quarantine.

Outbreak of SARS-CoV-2 Infections, Including COVID-19 Vaccine Breakthrough Infections, Associated with Large Public Gatherings — Barnstable County, Massachusetts, July 2021

Catherine M. Brown, DVM¹; Johanna Vostok, MPH¹; Hillary Johnson, MHS¹; Meagan Burns, MPH¹; Radhika Gharpure, DVM²; Samira Sami, DrPH²; Rebecca T. Sabo, MPH²; Noemi Hall, PhD²; Anne Foreman, PhD²; Petra L. Schubert, MPH¹; Glen R. Gallagher PhD¹; Timelia Fink¹; Lawrence C. Madoff, MD¹; Stacey B. Gabriel, PhD³; Bronwyn MacInnis, PhD³; Daniel J. Park, PhD³; Katherine J. Siddle, PhD³; Vaira Harik, MS⁴; Deirdre Arvidson, MSN⁴; Taylor Brock-Fisher, MSc⁵; Molly Dunn, DVM⁵; Amanda Kearns⁵; A. Scott Laney, PhD²

During July 2021, 469 cases of COVID-19 associated with multiple summer events and large public gatherings in a town in Barnstable County, Massachusetts, were identified among Massachusetts residents; vaccination coverage among eligible Massachusetts residents was 69%. Approximately three quarters (346; 74%) of cases occurred in fully vaccinated persons (those who had completed a 2-dose course of mRNA vaccine [Pfizer-BioNTech or Moderna] or had received a single dose of Janssen [Johnson & Johnson] vaccine ≥ 14 days before exposure). Genomic sequencing of specimens from 133 patients identified the B.1.617.2 (Delta) variant of SARS-CoV-2, the virus that causes COVID-19, in 119 (89%) and the Delta AY.3 sublineage in one (1%). Overall, 274 (79%) vaccinated patients with breakthrough infection were symptomatic. Among five COVID-19 patients who were hospitalized, four were fully vaccinated; no deaths were reported. Real-time reverse transcription–polymerase chain reaction (RT-PCR) cycle threshold (Ct) values in specimens from 127 vaccinated persons with breakthrough cases were similar to those from 84 persons who were unvaccinated, not fully vaccinated, or whose vaccination status was unknown (median = 22.77 and 21.54, respectively). The Delta variant of SARS-CoV-2 is highly transmissible (1); vaccination is the most important strategy to prevent severe illness and death. On July 27, CDC recommended that all persons, including those who are fully vaccinated, should wear masks in indoor public settings in areas where COVID-19 transmission is high or substantial.* Findings from this investigation suggest that even jurisdictions without substantial or high COVID-19

transmission might consider expanding prevention strategies, including masking in indoor public settings regardless of vaccination status, given the potential risk of infection during attendance at large public gatherings that include travelers from many areas with differing levels of transmission.

During July 3–17, 2021, multiple summer events and large public gatherings were held in a town in Barnstable County, Massachusetts, that attracted thousands of tourists from across the United States. Beginning July 10, the Massachusetts Department of Public Health (MA DPH) received reports of an increase in COVID-19 cases among persons who reside in or recently visited Barnstable County, including in fully vaccinated persons. Persons with COVID-19 reported attending densely packed indoor and outdoor events at venues that included bars, restaurants, guest houses, and rental homes. On July 3, MA DPH had reported a 14-day average COVID-19 incidence of zero cases per 100,000 persons per day in residents of the town in Barnstable County; by July 17, the 14-day average incidence increased to 177 cases per 100,000 persons per day in residents of the town (2).

During July 10–26, using travel history data from the state COVID-19 surveillance system, MA DPH identified a cluster of cases among Massachusetts residents. Additional cases were identified by local health jurisdictions through case investigation. COVID-19 cases were matched with the state immunization registry. A cluster-associated case was defined as receipt of a positive SARS-CoV-2 test (nucleic acid amplification or antigen) result ≤ 14 days after travel to or residence in the town in Barnstable County since July 3. COVID-19 vaccine breakthrough cases were those in fully vaccinated Massachusetts residents (those with documentation from the

*<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated.html>



Summary

What is already known about this topic?

Variants of SARS-CoV-2 continue to emerge. The B.1.617.2 (Delta) variant is highly transmissible.

What is added by this report?

In July 2021, following multiple large public events in a Barnstable County, Massachusetts, town, 469 COVID-19 cases were identified among Massachusetts residents who had traveled to the town during July 3–17; 346 (74%) occurred in fully vaccinated persons. Testing identified the Delta variant in 90% of specimens from 133 patients. Cycle threshold values were similar among specimens from patients who were fully vaccinated and those who were not.

What are the implications for public health practice?

Jurisdictions might consider expanded prevention strategies, including universal masking in indoor public settings, particularly for large public gatherings that include travelers from many areas with differing levels of SARS-CoV-2 transmission.

state immunization registry of completion of COVID-19 vaccination as recommended by the Advisory Committee on Immunization Practices,[†] ≥14 days before exposure). Specimens were submitted for whole genome sequencing[§] to either the Massachusetts State Public Health Laboratory or the Broad Institute of the Massachusetts Institute of Technology and Harvard University. Ct values were obtained for 211 specimens tested using a noncommercial real-time RT-PCR panel for SARS-CoV-2 performed under Emergency Use Authorization at the Broad Institute Clinical Research Sequencing Platform. On July 15, MA DPH issued the first of two Epidemic Information Exchange notifications to identify additional cases among residents of U.S. jurisdictions outside Massachusetts associated with recent travel to the town in Barnstable County during July 2021. This activity was reviewed by CDC and was conducted consistent with applicable federal law and CDC policy.[‡]

By July 26, a total of 469 COVID-19 cases were identified among Massachusetts residents; dates of positive specimen

collection ranged from July 6 through July 25 (Figure 1). Most cases occurred in males (85%); median age was 40 years (range = <1–76 years). Nearly one half (199; 42%) reported residence in the town in Barnstable County. Overall, 346 (74%) persons with COVID-19 reported symptoms consistent with COVID-19.^{**} Five were hospitalized; as of July 27, no deaths were reported. One hospitalized patient (age range = 50–59 years) was not vaccinated and had multiple underlying medical conditions.^{††} Four additional, fully vaccinated patients^{§§} aged 20–70 years were also hospitalized, two of whom had underlying medical conditions. Initial genomic sequencing of specimens from 133 patients identified the Delta variant in 119 (89%) cases and the Delta AY.3 sublineage in one (1%) case; genomic sequencing was not successful for 13 (10%) specimens.

Among the 469 cases in Massachusetts residents, 346 (74%) occurred in persons who were fully vaccinated; of these, 301 (87%) were male, with a median age of 42 years. Vaccine products received by persons experiencing breakthrough infections were Pfizer-BioNTech (159; 46%), Moderna (131; 38%), and Janssen (56; 16%); among fully vaccinated persons in the Massachusetts general population, 56% had received Pfizer-BioNTech, 38% had received Moderna, and 7% had received Janssen vaccine products. Among persons with breakthrough infection, 274 (79%) reported signs or symptoms, with the most common being cough, headache, sore throat, myalgia, and fever. Among fully vaccinated symptomatic persons, the median interval from completion of ≥14 days after the final vaccine dose to symptom onset was 86 days (range = 6–178 days). Among persons with breakthrough infection, four (1.2%) were hospitalized, and no deaths were reported. Real-time RT-PCR Ct values in specimens from 127 fully vaccinated patients (median = 22.77) were similar to those among 84 patients who were unvaccinated, not fully vaccinated, or whose vaccination status was unknown (median = 21.54) (Figure 2).

Transmission mitigation measures included broadening testing recommendations for persons with travel or close contact with a cluster-associated case, irrespective of vaccination status; local recommendations for mask use in indoor settings, irrespective of vaccination status; deployment of state-funded mobile testing and vaccination units in the town in Barnstable County; and informational outreach to visitors and residents. In this tourism-focused community, the Community

[†] As of May 2021, ACIP recommended that all adults aged ≥18 years receive any of the three COVID-19 vaccines available in the United States via Emergency Use Authorization from the Food and Drug Administration, including Pfizer-BioNTech, Moderna, and Janssen; persons aged ≥12 years are eligible to receive the Pfizer-BioNTech COVID-19 vaccine. Full vaccination is defined as receipt of 2 doses of the Pfizer-BioNTech or Moderna COVID-19 vaccines or 1 dose of Janssen COVID-19 vaccine ≥14 days before exposure.

[§] Genomic sequencing was performed using Illumina NovaSeq using the NEB LunaScript RT ARTIC SARS-CoV-2 Kit. Novel mutations were not identified in the spike protein of the cluster-associated genomes compared with genomes collected during the same period from ongoing genomic surveillance efforts at Broad Institute. Raw and assembled genomic data are publicly available under NCBI BioProject PRJNA715749.

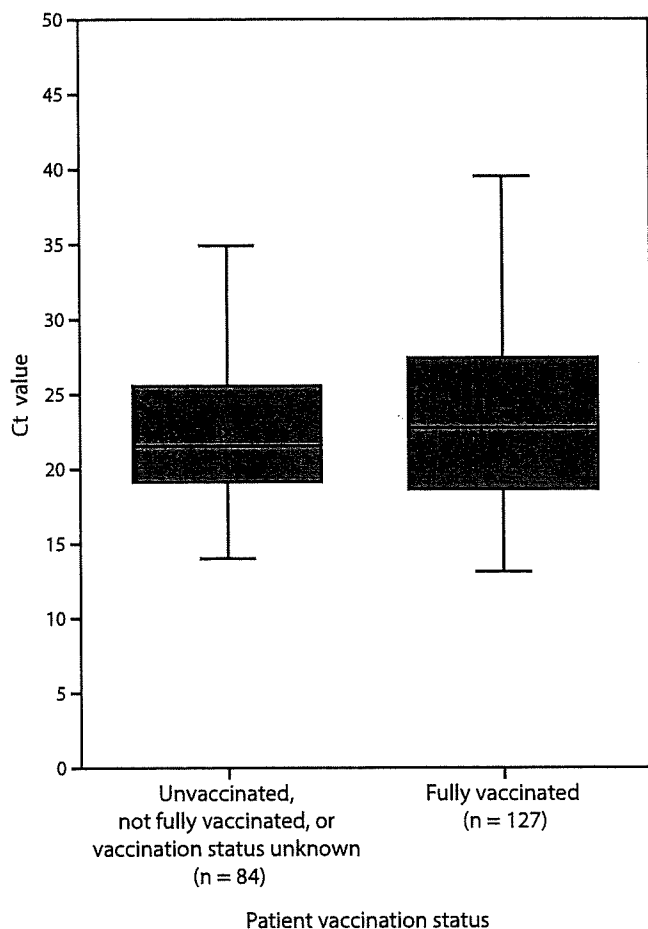
[‡] 45 C.F.R. part 46, 21 C.F.R. part 56; 42 U.S.C. Sect.241(d); 5 U.S.C. Sect.552a; 44 U.S.C. Sect.3501 et seq.

^{**} COVID-like symptoms were based on the Council of State and Territorial Epidemiologists surveillance case definition for COVID-19. <https://ndc.services.cdc.gov/case-definitions/coronavirus-disease-2019-2020-08-05/>

^{††} <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>

^{§§} One vaccinated, hospitalized COVID-19 patient had received the Pfizer-BioNTech vaccine and three had received the Janssen vaccine.

FIGURE 2. SARS-CoV-2 real-time reverse transcription–polymerase chain reaction cycle threshold values* for specimens from patients with infections associated with large public gatherings, by vaccination status† — Barnstable County, Massachusetts, July 2021[§]



Abbreviations: Ct = cycle threshold; RT-PCR = reverse transcription–polymerase chain reaction.

* Specimens were analyzed using a noncommercial real-time RT-PCR panel for SARS-CoV-2 performed under Emergency Use Authorization at the Clinical Research Sequencing Platform, Broad Institute of the Massachusetts Institute of Technology and Harvard University.

† Fully vaccinated was defined as ≥14 days after completion of state immunization registry–documented COVID-19 vaccination as recommended by the Advisory Committee on Immunization Practices.

§ Whiskers represent minimum and maximum observations; top of box represents the third quartile (Q3), bottom represents the first quartile (Q1), and box height represents the interquartile range. Midline is the median; “x” is the mean.

RT-PCR diagnostic tests might provide a crude correlation to the amount of virus present in a sample and can also be affected by factors other than viral load.^{†††} Although the assay used in this investigation was not validated to provide quantitative results, there was no significant difference between the Ct values of samples collected from breakthrough cases and

the other cases. This might mean that the viral load of vaccinated and unvaccinated persons infected with SARS-CoV-2 is also similar. However, microbiological studies are required to confirm these findings. ✕

Event organizers and local health jurisdictions should continually assess the need for additional measures, including limiting capacity at gatherings or event postponement, based on current rates of COVID-19 transmission, population vaccination coverage, and other factors.^{§§§} On July 27, CDC released recommendations that all persons, including those who are fully vaccinated, should wear masks in indoor public settings in areas where COVID-19 transmission is high or substantial. Findings from this investigation suggest that even jurisdictions without substantial or high COVID-19 transmission might consider expanding prevention strategies, including masking in indoor public settings regardless of vaccination status, given the potential risk of infection during attendance at large public gatherings that include travelers from many areas with differing levels of transmission.

§§§ <https://www.cdc.gov/coronavirus/2019-ncov/community/large-events/considerations-for-events-gatherings.html>

Acknowledgments

Hanna Shephard, Geena Chiumento, Nicole Medina, Juliana Jacoboski, Julie Coco, Andrew Lang, Matthew Doucette, Sandra Smole, Patricia Kludt, Natalie Morgenstern, Kevin Cranston, Ryan J. Burke, Massachusetts Department of Public Health; Sean O'Brien, Theresa Covell, Barnstable County Department of Health and the Environment; Marguerite M. Clougherty, John C. Welch, Community Tracing Collaborative; Jacob Lemieux, Christine Loreth, Stephen Schaffner, Chris Tomkins-Tinch, Lydia Krasilnikova, Pardis Sabeti, Broad Institute; Sari Sanchez, Boston Public Health Commission; Mark Anderson, Vance Brown, Ben Brumfield, Anna Llewellyn, Jessica Ricaldi, Julie Villanueva, CDC COVID-19 Response Team.

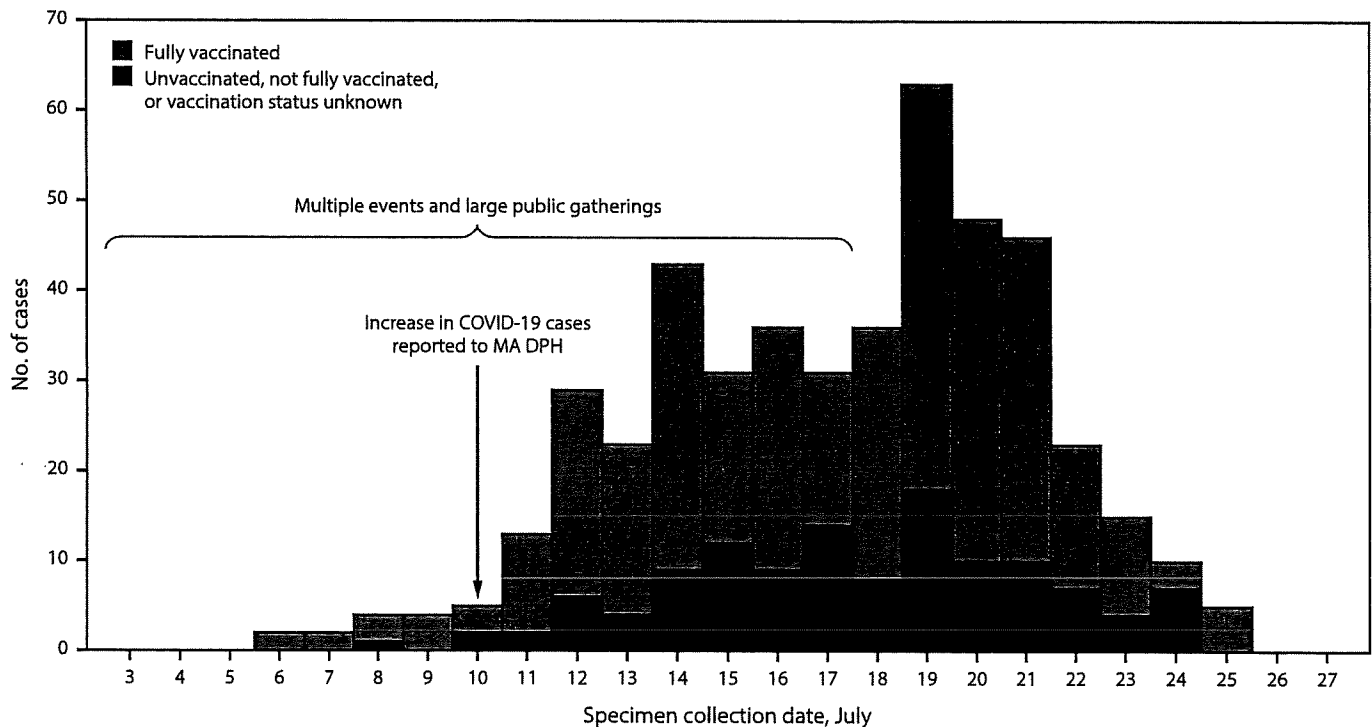
Corresponding author: Catherine Brown, catherine.brown@mass.gov.

¹Massachusetts Department of Public Health; ²CDC COVID-19 Response Team; ³Broad Institute, Cambridge, Massachusetts; ⁴Barnstable County Department of Health and the Environment, Massachusetts; ⁵Community Tracing Collaborative, Commonwealth of Massachusetts.

All authors have completed and submitted the International Committee of Medical Journal Editors form for disclosure of potential conflicts of interest. Stacey B. Gabriel reports receiving grants from CDC. Bronwyn MacInnis, Katherine Siddle, and Daniel Park report receiving grants from CDC and the National Institutes of Health. Taylor Brock-Fisher reports receiving a grant from the Community Tracing Collaborative. No other potential conflicts of interest were disclosed.

††† <https://www.cdc.gov/coronavirus/2019-ncov/lab/faqs.html>

FIGURE 1. SARS-CoV-2 infections (N = 469) associated with large public gatherings, by date of specimen collection and vaccination status* — Barnstable County, Massachusetts, July 2021



Abbreviation: MA DPH = Massachusetts Department of Public Health.

* Fully vaccinated was defined as ≥ 14 days after completion of state immunization registry–documented COVID-19 vaccination as recommended by the Advisory Committee on Immunization Practices.

Tracing Collaborative^{§§} conducted outreach to hospitality workers, an international workforce requiring messaging in multiple languages.

The call from MA DPH for cases resulted in additional reports of cases among residents of 22 other states who had traveled to the town in Barnstable County during July 3–17, as well as reports of secondary transmission; further analyses are ongoing. As of July 3, estimated COVID-19 vaccination coverage among the eligible population in Massachusetts was 69% (3). Further investigations and characterization of breakthrough infections and vaccine effectiveness among this highly vaccinated population are ongoing.

Discussion

The SARS-CoV-2 Delta variant is highly transmissible (1), and understanding determinants of transmission, including human behavior and vaccine effectiveness, is critical to developing prevention strategies. Multipronged prevention strategies are needed to reduce COVID-19–related morbidity and mortality (4).

^{§§} The Community Tracing Collaborative is a multiorganization partnership that has supported COVID contact tracing and outbreak investigation in Massachusetts. <https://www.mass.gov/info-details/learn-about-the-community-tracing-collaborative>

The findings in this report are subject to at least four limitations. First, data from this report are insufficient to draw conclusions about the effectiveness of COVID-19 vaccines against SARS-CoV-2, including the Delta variant, during this outbreak. As population-level vaccination coverage increases, vaccinated persons are likely to represent a larger proportion of COVID-19 cases. Second, asymptomatic breakthrough infections might be underrepresented because of detection bias. Third, demographics of cases likely reflect those of attendees at the public gatherings, as events were marketed to adult male participants; further study is underway to identify other population characteristics among cases, such as additional demographic characteristics and underlying health conditions including immunocompromising conditions.*** MA DPH, CDC, and affected jurisdictions are collaborating in this response; MA DPH is conducting additional case investigations, obtaining samples for genomic sequencing, and linking case information with laboratory data and vaccination history. Finally, Ct values obtained with SARS-CoV-2 qualitative

*** A preliminary analysis matching cluster-associated COVID-19 cases with the state HIV case surveillance data identified 30 (6%) cases with verified HIV infection; all were virally suppressed, and none were hospitalized as a result of infection with SARS-CoV-2.

References

1. CDC. COVID-19: SARS-CoV-2 variant classifications and definitions. Atlanta, GA: US Department of Health and Human Services, CDC; 2021. Accessed July 25, 2021. <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/variant-surveillance/variant-info.html>
2. Massachusetts Department of Public Health. COVID-19 response reporting. Boston, MA: Massachusetts Department of Public Health; 2021. Accessed July 25, 2021. <https://www.mass.gov/info-details/covid-19-response-reporting>
3. Massachusetts Department of Public Health. Massachusetts COVID-19 vaccination data and updates. Boston, MA: Massachusetts Department of Public Health; 2021. Accessed July 25, 2021. <https://www.mass.gov/info-details/massachusetts-covid-19-vaccination-data-and-updates#daily-covid-19-vaccine-report>
4. Christie A, Brooks JT, Hicks LA, Sauber-Schatz EK, Yoder JS, Honein MA. Guidance for implementing COVID-19 prevention strategies in the context of varying community transmission levels and vaccination coverage. *MMWR Morb Mortal Wkly Rep* 2021;70:1044–7. <https://doi.org/10.15585/mmwr.mm7030e2>

Readers who have difficulty accessing this PDF file may access the HTML file at https://www.cdc.gov/mmwr/volumes/70/wr/mm7031e2.htm?s_cid=mm7031e2_w. Address all inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop V25-5, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30329-4027 or to mmwrq@cdc.gov.

